

**Preliminary Ecological Appraisal**

**Brookside Business Park, Uttoxeter**

**November 2017**

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# Notice to readers

This report has been prepared by Absolute Ecology with all reasonable skill, care and diligence, within the terms of the contract with the client. The actions of the surveyor on site, and during the production of the report were undertaken in accordance with the Code of Professional Conduct for the Chartered Institute of Ecology and Environmental Management ([www.cieem.org.uk](http://www.cieem.org.uk)).

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The results of the survey and assessment work undertaken by Absolute Ecology are representative at the time of surveying.

Every endeavour has been made to identify the presence of protected species on site, where this falls within the agreed scope of works.

The flora and fauna detailed within this report are those noted during the field survey and from anecdotal evidence. It should not be viewed as a complete list of flora and fauna species that may frequent or exist on site at other times of the year.

Up to date standard methodologies have been used, which are accepted by Natural England and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on-site.

Absolute Ecology cannot take responsibility where Government, national bodies or industry subsequently modify standards.

Absolute Ecology cannot accept responsibility for data collected from third parties.

Reference to sections or particular paragraphs of this document taken out of context may lead to misrepresentation.

# Non-technical summary

Absolute Ecology LLP were commissioned to undertake a Preliminary Ecological Appraisal of land at, Brookside Business Park, Brookside Road, Uttoxeter, Staffordshire, Grid reference: SK 09563 33326. The Preliminary Ecological Appraisal was undertaken November 7<sup>th</sup>, 2017, by an experienced and licensed ecologist who is a full member of the Chartered Institute of Ecology & Environmental Management (MCIEEM).

The western part of the site comprised a collection of large warehouse and workshop buildings currently used by various businesses. There was also a small house and canteen building and a disused yard with crumbling buildings.

Some buildings had negligible potential for roosting bats and do not require any further survey. However, the house, canteen and disused yard area have up to moderate potential for bat roosts. It would therefore be necessary for at least two activity surveys to be carried out, one dusk and one dawn, conforming to the Bat Conservation Trust Best Practice 3<sup>rd</sup> edition 2016, These should be conducted within the appropriate season of May to September (May to August being optimal). **If these buildings can be retained no further surveys would be required on the contrary if these are to be re/developed/demolished, then the bat activity surveys would be required.**

Buildings 9, 11 & 12 showed low potential for bats given the various constraints it is therefore recommended at least one activity surveys to be carried out, either one dusk and one dawn, conforming to the Bat Conservation Trust Best Practice 3<sup>rd</sup> edition 2016, These should be conducted within the appropriate season of May to September (May to August being optimal). **If these buildings can be retained no further surveys would be required on the contrary if these are to be re/developed/demolished, then the bat activity surveys would be required**

Nesting birds may be present in buildings (particularly the house and canteen buildings, and the disused area), scrub, trees and grassland, during the bird breeding season (March to August inclusive). If vegetation or building removal are planned during these months, a prior check for nesting birds should be undertaken by an ecologist. Any active nests that are found must not be moved until fledglings have dispersed. Recommendations are given to provide a variety of bird nesting opportunities (e.g. bird boxes) within the site.

If there are likely to be any direct or indirect impacts on Picknall Brook as a result of development (including increased lighting, potential run-off or pollution events, and any work required to the banks or vegetation), further specialist survey for otter, water vole, and nesting kingfisher would be required. Appropriate survey windows for these species are provided.

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# 1.0 Introduction

## Background

- 1.1 Absolute Ecology LLP was commissioned to undertake a Preliminary Ecological Assessment of a site known as Brookside Business Park, Brookside Road, Uttoxeter, Staffordshire, Grid reference: SK 09563 33326.
- 1.2 It is proposed that the land will be used to construct new commercial premises.



Figure 1: Location of site

- 1.3 The Assessment was undertaken on the November 7<sup>th</sup> 2017 by Matthew James Haydock an experienced ecologist who is a full member of the Chartered Institute of Ecology & Environmental Management (CIEEM) whom has been involved in many projects including designing and undertaking ecological habitat surveys and site nature conservation evaluations; writing and implementing site management plans; acting in an advisory capacity to provide recommendations for ecological protection, enhancement and mitigation measures; protected species surveys under Natural England licence for survey and development; undertaking ecological impact assessment, appropriate assessment. Matthew has a National Diploma in ecology and Landscape studies and holds higher National Diploma in Environmental Management.
- 1.4 The scope of this appraisal has been determined in line with the proportional approach to ecological survey, assessment and subsequent recommendations for avoidance and mitigation of impacts, which is encouraged in the emerging 'BS 42020: Biodiversity – Code of practice for planning and development'. This report has been prepared with due consideration for various best-practice guidance and methodologies including those of the Chartered Institute of Ecology and Environmental Management (CIEEM (2012)1 and the emerging BS 42020.
- 1.5 The objective of this report is to provide the client with information on any known or potential protected or rare species that may be using the site, and to outline recommendations on how to proceed with the works in a legal and ecologically sensitive manner.

- 1.6 Unless the client indicates to the contrary, information on the species found to be present on the site will be passed to the county biological records centre to update records held for the area.

#### Site Description

- 1.7 The western part of the site comprised a collection of large warehouse and workshop buildings currently used by various businesses. There was also a small house and canteen building and a disused yard with crumbling buildings.
- 1.8 To the north and east, the site is surrounded by large buildings including supermarket and leisure facilities. To the south, Picknall Brook runs adjacent to the site, and the railway and Uttoxeter racecourse lies beyond. There is open countryside of arable fields to the east.

## 2.0 Methodology

### Desk Study

- 2.1 In order to compile background information on the site and immediate surroundings the Staffordshire Ecological Record (SER) was contacted.
- 2.2 Information requested was as follows:-
  - Records of protected species within the 2 km of the site.
  - Records of rare or notable species within the 2 km of the site.
  - Non-statutory site designations on or within 2 km of the site.
- 2.3 Additionally, MAGIC (Multi-Agency Geographic Information for the Countryside, 2010) was used to establish whether any of the following were present:-
  - Statutory site designations on or within 2 km of the site.
  - Statutory sites designated for bats within 5 km of the site.

### Habitat Survey

- 2.4 The site was visited on the 18<sup>th</sup> October 2016 and was surveyed in accordance with the Joint Nature Conservation Committee (JNCC) Phase I Habitat Survey methodology (JNCC, 2007). This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential that might warrant further study.
- 2.5 The observable higher plant species in each habitat type within the site, and their abundance, were recorded using the DAFOR scale:

D	Dominant
A	Abundant
F	Frequent
O	Occasional
R	Rare

### Fauna

- 2.6 Habitats present on the site were searched for obvious signs of faunal activity, e.g. presence of mammal tracks or herpetofauna under refugia. Any buildings and mature trees on site were visually examined from the ground to identify features with the potential to support roosting bats.
- 2.7 All bat species resident in the UK have been recorded using trees, buildings and built structures, e.g. bridges, at some time during the year (Bat Conservation Trust, 2016 3rd Edition). The buildings were inspected externally and internally, where access was available, for signs of bat activity. These typically include bat presence, droppings, feeding remains, urine stains and grease marks. Notes were made on the following in accordance with the guidelines published by the BCT (Bat Conservation Trust, 2016 3rd Edition) for the surveying of buildings and built structures:

- Type and age of building
- Type of construction
- Presence of potential roost features, e.g. hanging tiles, raised tiles, roof voids
- Information or evidence of work having been undertaken that could affect use of the structure by bats
- Amount and location of evidence of bats such as presence of live or dead bats, droppings, grease marks, urine stains, characteristic smell of bats.

2.8 In the absence of any evidence, trees and structures have been assigned a rating of suitability from negligible to high potential for supporting bats. The rating is based on the location of the structure in the surrounding landscape, the number and type of features suitable for use by bats and the surveyor's experience. For example, a structure with a high level of regular disturbance and few opportunities for access by bats that is in a highly urbanised area with few or no mature trees, parkland, woodland or wetland would have negligible potential. Conversely, a pre-20th-century or early 20th-century building with many features suitable for use by bats close to good foraging habitat would have high potential.

2.9 Survey methodology also utilized a number of passive monitoring techniques including an infra-red night-vision camera (XLT Bushnell Trophy Cam™: USA) to qualitatively record any evidence of bat activity inside the building during surveying periods. Further equipment included a NVMT-12x24 night vision scope (Yukon: USA), a SeeSnake 2 video endoscope, a GPS eTrex Venture HC, a hand net and a CB2 Clubman Deluxe high-power lamp with filter.

### **Valuation of Ecological Features**

2.10 The value of areas of habitat and plant communities has been measured against published criteria where available. Biodiversity Action Plans (BAPs) have been searched to identify whether action has been taken to protect all areas of a particular habitat and to identify current factors causing loss and decline of particular habitats. The presence of injurious and legally controlled weeds has also been taken into account.

2.11 When assigning a level of value to a species, its distribution and status (including a consideration of trends based on available historic records) has been taken into account. Other factors influencing the value of a species are: legal protection, rarity and Species Action Plans (SAPs). Guidance, where it is available, for the identification of populations of sufficient size for them to be considered of national or international importance has also been taken into account.

### **Survey Constraints**

#### 2.12 Data Search

Desk study data provides information on recorded species in the area and can be helpful for targeting survey. However, it is possible that protected species that have not been identified within the data search may occur on or adjacent to the site.

#### 2.13 Field survey

Habitats within 30 m of the site boundary were inspected as far as access allowed. Ponds up to 500m from the site were viewed where there was public access.



Fauna species present may not always leave field signs and in addition, species may take up residence on site subsequent to the survey. If no development takes place within 12 months of this survey report, the findings should be reviewed and may need updating, and a full survey should be repeated within three years

## **Nomenclature**

- 2.14 The English name only of flora and fauna species is given in the main text of this report; however, scientific names are used for invertebrates where no English name is available. Vascular plants and charophytes follow the nomenclature of The Botanical Society for the British Isles (BSBI) 2007 database (BSBI, 2011) with all other flora and fauna following the Nameserver facility of the National Biodiversity Network Species Dictionary (<http://www.nhm.ac.uk/nbn/>), which is managed by the Natural History Museum.

## 3.0 Legislation

- 3.1 The United Kingdom Biodiversity Action Plan (BAP) 1994 sets out a strategy for implementing the Convention on Biological Diversity, which was signed by the United Kingdom at the Rio de Janeiro Earth Summit in 1992. The published report contains action plans for the United Kingdom's most threatened species and habitat plans for the most vulnerable areas.
- 3.2 The Local BAP sets out the county's part in the UK biodiversity planning process, in the form of local habitat and species action plans. Local BAPs are intended to focus resources, to conserve and enhance biodiversity, by taking account of national and local priorities.
- 3.3 Schedule 1 Part 1 of The Wildlife and Countryside Act 1981 (and amendments) – this lists birds protected by special penalties at all times. It prohibits intentional killing/injuring, taking, possessing, disturbing and selling (including parts and derivatives, eggs, nests, *etc.* as applicable) as well as damaging, destroying or disturbing nests in current use or dependent young, *etc.*
- 3.4 Schedule 5 of The Wildlife and Countryside Act 1981 (and amendments) – this prohibits deliberate killing, injuring, taking, possessing, disturbing and selling (including parts and derivatives) as well as damaging, destroying or obstructing any structure or place of refuge of listed fauna, such as Dormouse, Otter and bat species.
- 3.5 The Conservation of Habitats and Species Regulations 2010, consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994, in respect of England and Wales. It is illegal to kill, disturb, destroy eggs, breeding sites or resting places, to pick, collect, take cuttings, uproot or destroy in the wild as well as keep, transport, sell/exchange and offer for sale/exchange species listed.
- 3.6 The Countryside and Rights of Way Act 2000 – this increases protection given by The Wildlife and Countryside Act 1981 (and amendments). The offence to intentionally damage any structure or place that a wild animal listed in Schedule 5 of the Act uses for shelter or protection or deliberately disturbing any such animal while in such a structure or place is extended so that the offence also covers reckless damage or disturbance. The CRoW Act also places a duty on Ministers and Government Departments to have regard for the purpose of conserving biological diversity in accordance with the Convention on Biological Diversity.
- 3.7 The Protection of Badgers Act 1992 - this Act makes it illegal to wilfully kill, injure or take any Badger, or attempt to do so and it is an offence to intentionally or recklessly damage, destroy or obstruct access to any part of a Badger sett.
- 3.8 The Natural Environment and Rural Communities Act, 2006 - as well as creating Natural England, this act gives all public authorities the duty to have regard for conserving biodiversity within the commission of their duties. This includes a duty to restore and enhance as well as maintain biodiversity. The act also strengthens protection for Sites of Special Scientific Interest (SSSI) and makes authorities liable for allowing damage to such sites or their features.

## 4.0 Results

### Desk Study

- 4.1 There are no statutory designated sites within 2 km of the site.
- 4.2 There are no statutory designated sites for bats within 5 km of the site.
- 4.3 There are three non-statutory sites within 2 km of the site.

Grid Ref.	Site Name	Status
SK111323	Woodford Rough	Local Wildlife Site
SK086322	Cox Bank Farm	Local Wildlife Site (SBI)
SK086318	Cox Bank Farm (south)	Biodiversity Alert Site

- 4.4 SER provided the following records for protected and notable species within 2 km of the site boundary:

**Plants** – Bluebell (7 records)

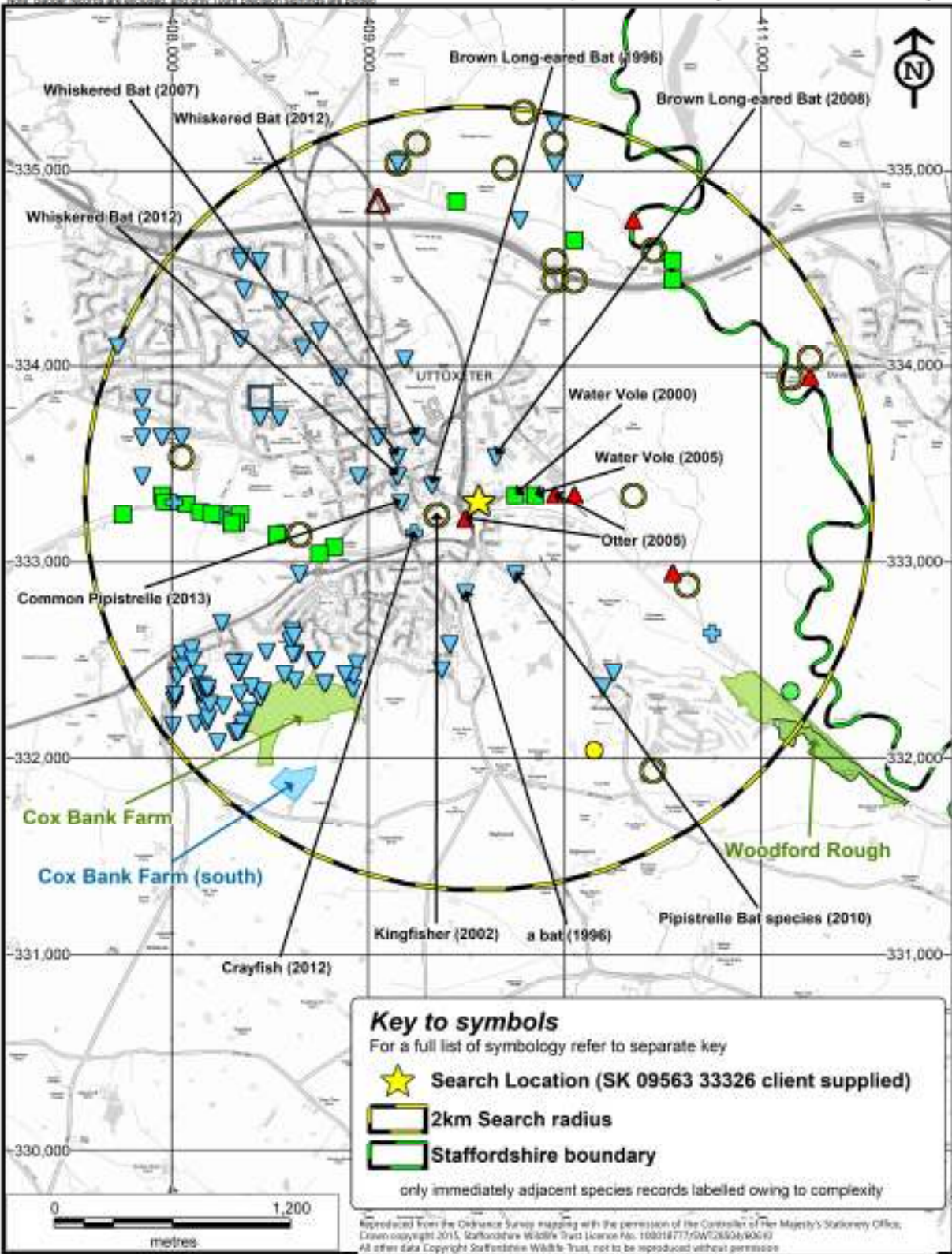
**Mammals** – Common Pipstrelle, Daubentons bat, Brown Long-eared bat, Noctule bat, Soprano bat, Common lizard, Pole Cat., Water vole, Otter.

**Reptile** – Common lizard

**Birds** – Northern Goshawk, Marsh Warbler, Common Kingfisher, Northern Pintail, Garganey, Greylag Goose, Greater Scaup, Common Goldeneye, Ruff, Little Plover, Black Tern, Eurasian Marsh Harrier, Whooper Swan, Little Egret, Merlin, Peregrine Falcon, Eurasian Hobby, Brambling, Great Northern Diver, Little Gull, Mediterranean Gull, Black-tailed Godwit, Common Scoter, Smew, Red Kite, Whimbrel, Osprey, Red-necked Phalarope, Black Redstart, Eurasian Spoonbill, European Golden Plover, Black-necked Grebe, Common Tern, Arctic Tern, Little Tern, wood sandpiper, Common Greenshank, Green Sandpiper, Redwing, Fieldfare, Barn Owl.

Please see below page 12 & 13 Biological Map of protected species and sites.

**Nature Conservation Sites and Species within 2km of  
 Brookside Business Park, Brookside Road, Uttoxeter (SK 09563 33326)**






# A legend to the map showing Nature Conservation Sites and Species




## Introduction

These colours are used on the site alert mapping within the SWT GIS, but SER cannot guarantee the same colours are used in any other mapping system, particularly those based on ArcView.

## Statutory Designations from Natural England's web-site

- |   |                                      |   |  |
|---|--------------------------------------|---|--|
|  | National Nature Reserves             | ★ | NNR (boundary not available owing to OS restrictions)  |
|  | Sites of Special Scientific Interest | ★ | SSSI (boundary not available owing to OS restrictions) |
|  | Local Nature Reserves                | ★ | LNR (boundary not available owing to OS restrictions)  |


## Non-statutory Designations from the Staffordshire Grading System (1995 onwards)

- |   |  |
|---|--|
|  | Site of Biological Importance (ex Grade 1 SBI) equivalent to "Local Wildlife Site" |
|  | Biodiversity Alert Site (ex Grade 2 SBI)   |
|  | Proposed/potential Site of Biological Importance                                   |


## Geological Sites

- |   |   |
|---|---|
|  | Regionally Important Geological/geomorphological Site (= Local Geological Site) |
|---|---|



## Staffordshire Wildlife Trust Sites

- |   |                     |
|---|---------------------|
|  | SWT Nature Reserves |
|---|---------------------|

## Other Nature Reserves

- |   |   |
|---|---|
|  | Royal Society for the Protection of Birds |
|---|---|

## Ancient Woodland Inventory

- |   |                                 |
|---|---------------------------------|
|  | Ancient & Semi-natural Woodland |
|  | Ancient Replanted Woodland      |

## Species Information

- |   |   |   |  |
|---|---|---|--|
|  | Mammals excluding those listed below                  |  | Amphibians and reptiles excluding those below        |
|  | Otter ( <i>Lutra lutra</i> )                          |  | Great Crested Newt ( <i>Triturus cristatus</i> )     |
|  | Badger ( <i>Meles meles</i> ) - not normally supplied |  | Native Crayfish ( <i>Austropotamobius pallipes</i> ) |
|  | Water Vole ( <i>Arvicola terrestris</i> )             |  | Flowering plants except those below                  |
|  | All bat species                                       |  | Bluebell ( <i>Hyacinthoides non-scripta</i> )        |
|  | All bird species                                      |  | Butterflies and Moths                                |
|  | Any other protected species (precise to 100m)         |  | BAP Species Records (precise to 100m)                |
|  | All Protected Species Records (precise to 1km)        |  | BAP Species Records (precise to 1km)                 |

## Notes:

The Local Nature Reserve and other nature reserve boundaries can overlay the current grading when both layers are actively visible

Where there are multiple species records for the same grid reference the dot for one species may obscure the dots for other species - all species records will be displayed in the accompanying spreadsheet

Not all the above categories may be present on the accompanying map

**Version 2.0 July 2011**




## Habitats

4.5 The following habitats or vegetation types were identified on the site during the course of the habitat survey.

- Buildings
- Amenity Grassland
- Trees

### *Buildings*

4.6 There were numerous buildings on the western part of the site, which was a working business park. The buildings are numbered (locations on Figure 2) and described in the following Table 2.

Building No.	Building description	Potential for bats / birds
1	<p>Long one-storey unit divided into workshops with rendered walls, double pitched unlined asbestos roof, false ceiling. Flat roof extension on west end.</p> 	<b>Low</b> potential for bats and nesting birds.
2	<p>Warehouse of metal and asbestos walls and roof. Internally open to roof (no ceilings).</p>	<b>Negligible</b> potential for bats, <b>low</b> potential for nesting birds.
3	<p>Three storey building with triple pitched roof</p>	<b>Negligible</b> potential for bats and




	made of glass windows.	nesting birds.
4	<p>Large warehouse of metal walls and asbestos roof. Noisy during daytime due to metal works. Internally open to roof.</p>  <p>Plate 2: External view</p>  <p>Plate 3: External view</p>	<p><b>Negligible</b> potential for bats and nesting birds.</p>
5	<p>Warehouse of brick walls and metal shutters on end. Shallow pitched roof of metal / asbestos. Internally open to roof. Very noisy during daytime due to metal works.</p> 	<p><b>Negligible</b> potential for bats and nesting birds.</p>

Plate 4: Showing external

8

Small two-storey brick house with tiled roof. Gaps under tiles and ridge tiles. Old wooden barge boards warped / rotten. Internal unsafe to fully inspect.

**Moderate** potential for bats and nesting birds.



Plate 5: Showing view of dwelling



Plate 6: Showing raised roofing tiles.



Plate 7: Showing internal view of roof void






<p>9</p>	<p>Crumbling brick building with asbestos roof and open-fronted shelter on one side.</p>  <p>Plate 8: Showing external view of the building</p>	<p><b>Low</b> potential for bats, <b>moderate</b> potential for nesting birds.</p>
<p>10</p>	<p>Single storey brick building (canteen) with slate roof. Slates well-fitting but roof and walls deteriorating. Some slates missing and gaps under ridge tiles. Missing loft hatch inside gives access to roof space, roof is lined with boards under slates.</p>  <p>Plate 9: Showing external view of building</p>  <p>Plate 10: Showing missing roofing slates.</p>	<p><b>Moderate</b> potential for bats and nesting birds.</p>



Plate 11: Showing internal view of roof void

11

Large complex rendered brick building with metal / brick extensions. Asbestos roof. Internal false ceilings of plasterboard but no lining to asbestos roof. Part of the south side of the building had derelict open-fronted structures which were deteriorating, parts of the walls had missing bricks and it faced into a fenced yard full of rubble.



Plate 9: Showing external view of building

**Low** potential for bats.


**Nesting wood pigeons** were observed in a remaining part of the metal roof of the open-fronted structure. Birds may also nest in cavities in walls (e.g. where bricks are missing) and scrub / rubble piles.

12

Two-storey brick building with some crevices within brick work the internal contains false ceilings and asbestos roof.



**Low** potential for bats and nesting birds.

	Plate 10: Showing external view of building	
	<p>A disused area of the site showed a brick wall with cracks and crevasses that could be used by bats or birds. Due to the unsound structure of the derelict building an inspection could not be conducted.</p>  <p>Plate 11: Showing derelict building and wall</p>	<p><b>Moderate</b> potential for bats and nesting birds.</p>

*Amenity grassland*

- 4.7 There was a small area of amenity grassland adjacent to Brookside Road and the south entrance of the business park. This comprised annual meadow-grass *Poa annua*, common bent *Agrostis capillaris*, daisy *Bellis perennis*, dandelion *Taraxacum officinalis* and abundant yarrow *Achillea millefolium*.



Plate 12: Showing amenity grassland

*Scattered*

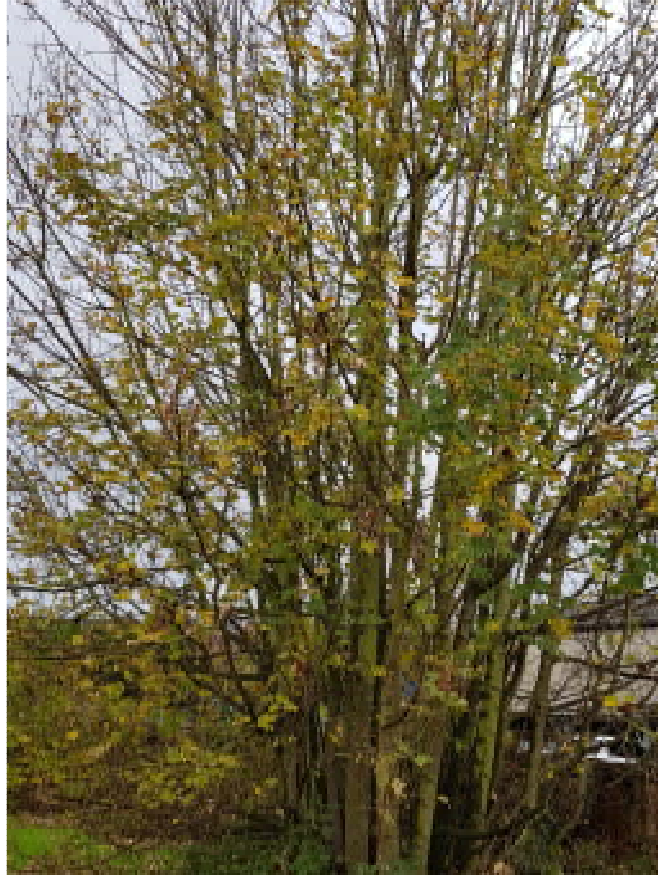
- 4.8 In the disused area of the business park, there was scrub including a line of goat willow *Salix caprea* and scattered butterfly bush *Buddleia* sp. and elder *Sambucus nigra*. There was also a small patch of willow and butterfly bush scrub by the area of amenity grassland adjacent to the south entrance of the business park.



Plate 13: Showing disused area.

### *Scattered Trees*

- 4.9 There were several young sycamore *Acer pseudoplatanus* trees on the patch of amenity grassland near the south entrance to the business park.



### *Running Water*

- 4.10 The site lay adjacent to Picknall Brook, a shallow stream which ran through a man-made channel in the section running alongside the site boundary. The banks of the watercourse were lined with vegetation including mature and young trees, grasses and herbs.

## **Fauna**

### *Bats*

- 4.11 SER provided several records of bat species within 2 km of the site. Some buildings on site had negligible potential though buildings 9, 11 & 12 showed low potential.
- 4.12 The house, canteen buildings had moderate potential for roosting bats, due to the presence of tiled roofs with access points under tiles, and roof spaces. There was moderate potential for roosting bats in the disused area of the business park, where walls and roof structures were crumbling, providing potential cavities that could be used by bats. A close inspection was not possible in this area due to the presence of dangerous structures.
- 4.13 The young trees were assessed using the Bat Conservation Trust Best Practice 3<sup>rd</sup> edition 2016 in evaluating the trees for supporting potential bat roost opportunities, during the inspection of the trees did not provide potential to support bats due to the lack of cracks or crevasses, raised barks, wood pecker holes.

### *Dormice*

- 4.15 There are no records of Dormice occurring within 2 km of the site. The potential for the site to support Dormice is low due to no habitat that would support such a species.

### *Water Voles and Otters*

- 4.16 There are no records of Water Voles or Otters occurring within 2 km of the site. No signs of water voles were seen in the section of stream adjacent to the site boundary, although a close inspection was not undertaken.
- 4.17 Otter may occasionally use Picknall Brook for commuting to other water courses. No evidence of otter was seen in the section adjacent to the site boundary, although a close inspection was not undertaken.

### *Birds*

- 4.18 Records of Hobby, Common Tern, and Kingfisher were provided by SER. During the survey, the following bird species were recorded on site: pied wagtail *Motacilla alba*, sparrowhawk *Accipiter nisus*, house sparrow *Passer domesticus*, woodpigeon *Calumbra palumbus* and magpie *Pica pica*. A pair of nesting woodpigeons were observed in a metal roof structure in the disused area. The buildings (particularly cavities within the roofs of the house, canteen and disused buildings) and trees provide potential nesting habitat for common and widespread species of birds.

### *Reptiles*

- 4.19 SER did provide a record of Common lizard. The site is generally unsuitable for reptiles and lacks extensive areas of scrub with open basking areas typically associated with reptiles. No Refugia was evident on site and the grassland is regularly grazed or cut which would cause a high amount of disturbance and lack of cover.

### *Amphibians*

- 4.20 SER provided no records of amphibian species within 2 km of the site. There is no ponds or ditches on site or terrestrial habitat.

### *Invertebrates*

- 4.21 SER did not provide any records of protected or notable invertebrate species within 2km. The habitats on site are generally common and do not provide much potential for rare invertebrate species although they are expected to support a number of more common species.

## **5.0 Development Constraints and Recommendations**

- 5.1 The site is the subject of a possible planning application for a residential development. Ecological constraints and recommendations with regard to any development are discussed below.

### **Designated Sites**

- 5.2 There is no designated site though three non-designated statutory site are within 2 km of the site.

### **Habitats**

- 5.3 Botanically, the site itself does not appear to have any rare species and it is not particularly diverse.

### **Potential Impacts of Works**

- 5.4 There are existing plans for the site; however, if residential development is undertaken in the future, potential impacts are likely to include the following.
- 5.5 Removal of the house, canteen, disused yard area and buildings 9, 11 & 12 would affect bats, if present, through direct harm or loss of roost sites. Removal of grassland and indirect impacts on the stream corridor (e.g. increased lighting) may affect foraging and commuting routes.
- 5.6 Nesting birds may be present in the trees or buildings during the bird breeding season (March to August inclusive). If vegetation removal is planned during these months, this could have a negative impact on nesting birds.
- 5.7 If Picknall Brook requires any work to vegetation, bridges or banks, there would be direct impacts on species using this stream corridor. There may also be indirect impacts of nearby development including pollution run-off, increase in lighting and increased disturbance. Both direct and indirect impacts may negatively affect otters, water voles and kingfishers, if present, by loss or damage of habitat and harm to individual animals.



## Recommendations

- 5.8 The following are general recommendations that are likely to be a minimum requirement for any future development of the site.

### Bats

- 5.9 the house, canteen and disused yard area have up to moderate potential for bat roosts. It would therefore be necessary for at least two activity surveys to be carried out, one dusk and one dawn, conforming to the Bat Conservation Trust Best Practice 3<sup>rd</sup> edition 2016, These should be conducted within the appropriate season of May to September (May to August being optimal). **If these buildings can be retained no further surveys would be required on the contrary if these are to be re/developed/demolished then the bat activity surveys would be required.**
- 5.10 Buildings 9, 11 & 12 showed low potential for bats given the various constraints it is therefore recommended at least one activity surveys to be carried out, either one dusk and one dawn, conforming to the Bat Conservation Trust Best Practice 3<sup>rd</sup> edition 2016, These should be conducted within the appropriate season of May to September (May to August being optimal). **If these buildings can be retained no further surveys would be required on the contrary if these are to be re/developed/demolished then the bat activity surveys would be require.**

**Table 7.1 Recommended timings for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).**

Low roost suitability	Moderate roost suitability	High roost suitability
May to August (structures) No further surveys required (trees)	May to September <sup>a</sup> with at least one of surveys between May and August <sup>b</sup>	May to September <sup>a</sup> with at least two of surveys between May and August <sup>b</sup>

**Table: Showing Bat Conservation Trust 3<sup>rd</sup> Edition 2016 Recommended timings**

**Table 7.3 Recommended minimum number of survey visits for presence/absence surveys to give confidence in a negative result for structures (also recommended for trees but unlikely to give confidence in a negative result).**

Low roost suitability	Moderate roost suitability	High roost suitability
One survey visit. One dusk emergence or dawn re-entry survey <sup>a</sup> (structures). No further surveys required (trees).	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. <sup>b</sup>	Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn. <sup>b</sup>

**Table: Showing Bat Conservation Trust 3<sup>rd</sup> Edition 2016 Recommended minimum survey visits.**

### **Otter & water vole**

- 5.11 If Picknall Brook has potential to be affected by the development (including indirect impacts such as increased lighting, pollution events, run-off from construction etc) further survey for otter, water vole should be undertaken.
- 5.12 Otter survey can be undertaken at any time. Water vole surveys are best undertaken between April and August. A search for active kingfisher nests would have to be undertaken during the breeding season which runs from March to August.

### **Birds**

- 5.13 Where possible, habitats suitable for nesting and foraging birds should be retained, enhanced or created within any new development. The buildings within the site are likely to be the most valuable to nesting birds, and should be retained as far as possible.
- 5.14 It would be of conservation benefit to install a variety of nesting boxes for different bird species within the site in future (buildings and trees where suitable) to enhance the site for nesting birds and encourage bird diversity. Information on bird nesting boxes can be found at <http://www.rspb.org.uk/advice/helpingbirds/nestboxes/>. Enhancing existing hedgerows or planting new hedgerows and shrubs within any new development can benefit birds if a wide range of native species are used.
- 5.15 Similar to bats, bird habitats, including nesting and roosting sites, are diminishing or have disappeared altogether due to changes in the landscape, environment and building techniques. Consequently, the provision of boxes for birds will provide supplementary nesting sites that are relatively safe from predators, close to feeding areas, and give essential winter protection for roosting birds. A range of designs are available to suit most species, including garden species, birds of prey and colonial nesting species, for both trees and buildings. Colonial nesting species, such as House Sparrows, which are currently facing a dramatic decline, suffer from a lack of suitable buildings in which to nest. Moulded woodcrete boxes can be used to form a network of contiguous boxes favoured by the species. Additionally, nesting baskets can be used to encourage birds of prey to areas where they have not previously nested. Health risks from breeding birds generally relate to Feral Pigeons and Starlings, and require direct contact with nesting material, dried faeces etc., within confined spaces. Consequently, the public health risk relating to encouraging nesting birds on the new housing development is considered to be negligible.
- The Sparrow terrace nest boxes and the 1B Schwegler nest boxes will be positioned on the existing trees or incorporated onto the new dwelling or garages.
  - All the bird boxes will be positioned at least 4 metres high, or more.

**Table 1: Bird boxes to be incorporated into the new development**

<b>Bird Boxes</b>	<b>Type and Quantity</b>	<b>Information</b>
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**1 x Sparrow Terrace**

The Sparrow Terrace will attract Sparrows, but also Tits and Redstarts. These should be incorporated onto retained trees within the proposed development or if possible to new development



**2 x No. 10 Schwegler Swallow Nest**

The No. 10 Schwegler Swallow Nest will attract swallow species. These should be incorporated onto retained buildings within the proposed development.

## 6.0 References

- Anon (1995) *Guidelines for Baseline Ecological Assessment*. Institute of Environmental Assessment, Chapman & Hall.
- Anon (1995) *The UK Biodiversity Action Plan*. Joint Nature Conservation Committee, Peterborough.
- Anon (1999) *Advice Sheet 10: Reptile Survey*. Froglife, Peterborough.
- Anon (2002) *Badgers and Development*. English Nature, Peterborough.
- Anon (2003) *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit* (Revised reprint). Joint Nature Conservancy Council, Peterborough.
- Anon (2004) *Reptiles: Guidelines for Developers*. English Nature, Peterborough.
- Foster, J. (2001) *Great Crested Newt Mitigation Guidelines*. English Nature, Peterborough.
- Gent, T. & Gibson, S. (1998) *Herpetofauna Workers Manual*. Joint Nature Conservation Committee, Peterborough.
- Hundt L (2012) *Bat Surveys: Good Practice Guidelines*, 2nd edition, Bat Conservation Trust.
- Mitchell-Jones, A.J. (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.
- Mitchell-Jones, A.J. & McLeish, A.P. [Eds.] (2004). *The Bat Workers Manual* (3rd edition). Joint Nature Conservancy Council, Peterborough.
- Rose, F. (1991). *The Wild Flower Key*. Frederick Warne, London.

### **Websites used:**

Protected Sites: [www.magic.gov.uk](http://www.magic.gov.uk)

Protected Species: <http://data.nbn.org.uk/>

Rotherham Biodiversity Action Plan:

[http://www.rotherham.gov.uk/info/1009/wildlife/946/biodiversity\\_action\\_plan/1](http://www.rotherham.gov.uk/info/1009/wildlife/946/biodiversity_action_plan/1)

UKBAP: <http://jncc.defra.gov.uk/page-5155>

[www.rspb.org.uk](http://www.rspb.org.uk)

[www.streetmap.co.uk](http://www.streetmap.co.uk)

[www.maps.google.co.uk](http://www.maps.google.co.uk)

[www.bing.com/maps](http://www.bing.com/maps)

### **Web addresses for access to full UK legislation and policy text:**

Conservation (Natural Habitats &c.) Regulations 1994:

[http://www.opsi.gov.uk/si/si1994/uksi\\_19942716\\_en\\_1](http://www.opsi.gov.uk/si/si1994/uksi_19942716_en_1)

Conservation (Natural Habitats &c.) (Amendment) Regulations 2007:

[http://www.opsi.gov.uk/si/si2007/uksi\\_20071843\\_en\\_1](http://www.opsi.gov.uk/si/si2007/uksi_20071843_en_1)

Conservation (Natural Habitats &c.) (Amendment) Regulations 2009:  
[http://www.legislation.gov.uk/uksi/2009/6/pdfs/uksi\\_20090006\\_en.pdf](http://www.legislation.gov.uk/uksi/2009/6/pdfs/uksi_20090006_en.pdf)

Habitats Directive:  
[http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index\\_en.htm](http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm)

Wildlife and Countryside Act 1981:  
<http://www.legislation.gov.uk/ukpga/1981/69>

Countryside and Rights of Way Act 2000:  
<http://www.legislation.gov.uk/ukpga/2000/37/contents>

Protection of Badgers Act 1992:  
[http://www.opsi.gov.uk/ACTS/acts1992/ukpga\\_19920051\\_en\\_1](http://www.opsi.gov.uk/ACTS/acts1992/ukpga_19920051_en_1)

Natural Environment and Rural Communities Act 2006:  
<http://www.legislation.gov.uk/ukpga/2006/16/contents>

National Planning Policy Framework 2012:  
<http://www.communities.gov.uk/publications/planningandbuilding/nppf>

## 7.0 Plans

### Phase 1 Habitat Map

